

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MINNESOTA**

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NITRIDE SEMICONDUCTORS CO., LTD.,

Civil Action No. 0:17cv04359-DWF-LIB

Plaintiff,

**JURY TRIAL DEMANDED**

v.

DIGI-KEY CORPORATION D/B/A/ DIGI-  
KEY ELECTRONICS,

Defendant.

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**ANSWER TO COMPLAINT AND AFFIRMATIVE DEFENSES**

Defendant Digi-Key Corporation (“Digi-Key” and “Defendant”) hereby responds to the Complaint for Patent Infringement (“Complaint”) of Plaintiff Nitride Semiconductors Co., Ltd. (“NSC” or “Plaintiff”). Digi-Key denies that it infringes any valid, enforceable, and properly construed claims of U.S. Patent No. 6,861,270 (the “’270 Patent” or “Patent-in-Suit”). Digi-Key denies that there is any basis for this suit and denies that Plaintiff is entitled to any relief. Digi-Key denies all allegations not specifically admitted in this Answer.

Digi-Key additionally submits its defenses against Plaintiff. In particular, Digi-Key seeks a judgment denying and dismissing Plaintiff’s claim against Digi-Key with prejudice and declaring the Patent-in-Suit invalid, unenforceable, and/or not infringed. Digi-Key further seeks an order finding that this is an exceptional case under 35 U.S.C. § 285, and awarding Digi-Key its attorneys’ fees, expenses, and costs in defending this action. Further, this action against Digi-Key should be stayed pending the outcome of a proceeding pending in the Northern District of California against RayVio Corp., the manufacturer of the accused products, for the reasons set forth in Digi-Key’s Motion to Stay.

## **INTRODUCTION**<sup>1</sup>

1. Digi-Key admits that NSC's Complaint purports to bring an action for patent infringement. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the remaining allegations in paragraph 1 of the Complaint and, therefore, denies them.

2. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 2 of the Complaint and, therefore, denies them.

3. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 3 of the Complaint and, therefore, denies them.

4. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 4 of the Complaint and, therefore, denies them.

5. Digi-Key admits that NSC's Complaint purports to bring an action for patent infringement against RayVio Corporation's ("RayVio") UV LEDs. Digi-Key admits paragraph 5 purports to quote from a Digi-Key press release. Digi-Key admits that it sells RayVio's UV LEDs. Digi-Key admits that NSC has sued RayVio for infringement of U.S. Patent No. 6,861,270 in the Northern District of California, and that the case, *Nitride Semiconductors Co., Ltd. v. RayVio Corporation*, No. 5:17-cv-02952 (N.D. Cal.), is currently pending. Digi-Key denies the remaining allegations of paragraph 5.

## **THE PARTIES**

6. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 6 of the Complaint and, therefore, denies them.

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<sup>1</sup> The headings of the Complaint are repeated herein for convenience. Digi-Key denies any allegations in the headings.

7. Digi-Key admits it is a company organized and existing under the laws of the State of Minnesota, with its principal place of business located at 701 Brooks Avenue South, Thief River Falls, MN 56701.

### **JURISDICTION AND VENUE**

8. Digi-Key admits that the Complaint purports to state a cause of action under the patent laws of the United States, 35 U.S.C. § 271, et seq. Digi-Key admits that this Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) but denies that NSC has standing and that all necessary parties have been named in this lawsuit, as stated herein.

9. For purposes of this particular action, Digi-Key admits that this Court has personal jurisdiction over Digi-Key. Digi-Key admits that its principal place of business is located within the District of Minnesota and that it transacts business and is incorporated in the State of Minnesota. Digi-Key denies the remaining allegations in paragraph 9 of the Complaint.

10. For purposes of this particular action, Digi-Key admits that venue in this district may be proper under 28 U.S.C. §§ 1391(b) and under 28 U.S.C. § 1400(b). Digi-Key admits that its principal place of business is located within the District of Minnesota. Digi-Key denies the remaining allegations in paragraph 10 of the Complaint.

### **PATENT-IN-SUIT**

11. Digi-Key admits that the '270 Patent is entitled "Method for Manufacturing Gallium Nitride Compound Semiconductor and Light Emitting Element," and that the face of the patent lists Mr. Shiro Sakai as the inventor. Digi-Key admits that the face of the patent lists the date of issuance as March 1, 2005. Digi-Key admits that Exhibit 1 purports to be a copy of the '270 patent. Digi-Key denies the remaining allegations of paragraph 11.

**COUNT I**  
**(PATENT INFRINGEMENT - '270 PATENT)**

12. Digi-Key incorporates by reference its responses to paragraphs 1-11 as if fully restated herein.

13. Digi-Key admits that certain of RayVio's UV LEDs are available for purchase on its website. Digi-Key admits a product with RayVio Part No. RVXP4-280-SM-076232 (Digi-Key Part No. 1807-1012-ND) is available for purchase on Digi-Key's website. Digi-Key denies the remaining allegations of paragraph 13.

14. Denied.

15. Denied.

16. Denied.

17. Admitted.

18. Denied.

19. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 19 of the Complaint and, therefore, denies them.

20. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 20 of the Complaint and, therefore, denies them.

21. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 21 of the Complaint and, therefore, denies them.

22. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 22 of the Complaint and, therefore, denies them.

23. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 23 of the Complaint and, therefore, denies them.

24. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 24 of the Complaint and, therefore, denies them.

25. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 25 of the Complaint and, therefore, denies them.

26. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 26 of the Complaint and, therefore, denies them.

27. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 27 of the Complaint and, therefore, denies them.

28. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 28 of the Complaint and, therefore, denies them.

29. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 29 of the Complaint and, therefore, denies them.

30. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 30 of the Complaint and, therefore, denies them.

31. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 31 of the Complaint and, therefore, denies them.

32. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 32 of the Complaint and, therefore, denies them.

33. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 33 of the Complaint and, therefore, denies them.

34. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 34 of the Complaint and, therefore, denies them.

35. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 35 of the Complaint and, therefore, denies them.

36. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 36 of the Complaint and, therefore, denies them.

37. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 37 of the Complaint and, therefore, denies them.

38. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 38 of the Complaint and, therefore, denies them.

39. Digi-Key admits that the '289 application states "Localized regions of excess Ga cause localized reduction in AlN mole fraction, corresponding to band structure potential fluctuations, which form favored locations for the recombination of electrons 120 and holes 130, resulting in light emission 5." Digi-Key denies the remaining allegations of paragraph 39.

40. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 40 of the Complaint and, therefore, denies them.

41. Denied.

42. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 42 of the Complaint and, therefore, denies them.

43. Denied.

44. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 44 of the Complaint and, therefore, denies them.

45. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 45 of the Complaint and, therefore, denies them.

46. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 46 of the Complaint and, therefore, denies them.

47. Digi-Key lacks information or knowledge sufficient to form a belief as to the truth of the allegations in paragraph 47 of the Complaint and, therefore, denies them.

48. Denied.

49. Denied.

50. Denied.

### **PRAYER FOR RELIEF**

The remainder of NSC's Complaint comprises the prayer for relief to which no response is required. To the extent any response is deemed to be required, Digi-Key denies that it has infringed any valid and enforceable claim of the '270 patent. Digi-Key further denies that NSC is entitled to any relief whatsoever against Digi-Key, either as requested or otherwise.

### **JURY DEMAND**

Digi-Key admits that NSC has demanded a trial by jury in this action.

### **GENERAL DENIAL**

Digi-Key denies each and every allegation of the Complaint not specifically admitted above.

### **AFFIRMATIVE DEFENSES**

In addition to the defenses set forth below, Digi-Key expressly reserve the right to allege additional defenses, including, without limitation, inequitable conduct and patent exhaustion, if and as they become known throughout the course of discovery.

### **FIRST AFFIRMATIVE DEFENSE: Non-Infringement of the '270 Patent**

Digi-Key does not infringe any valid and enforceable claim of the '270 Patent, either literally or under the doctrine of equivalents.

**SECOND AFFIRMATIVE DEFENSE: Invalidity of the '270 Patent**

One or more claims of the '270 Patent are invalid for failing to meet one or more of the requisite statutory requirements and/or conditions for patentability under Title 35 of the United States Code, including without limitation §§ 101, 102, 103, and/or 112.

One or more claims of the '270 Patent are invalid as indefinite, lacking enablement, and lacking written description pursuant to 35 U.S.C. § 112. For example, the following claim limitation are indefinite and lack both written description and enablement: (1) “wherein a spatial fluctuation is created in the band gap by variation in the compositional ratio in the second gallium nitride based semiconductor created by the composition material” and (2) “a second gallium nitride based semiconductor layer having a varied compositional ratio.

The '270 specification discloses “The present inventors have confirmed that when a voltage is applied to a double hetero type light emitting element obtained as described above so that light is emitted, the illumination intensity is approximately 10 times the illumination intensity for a structure grown without forming the Ga droplets 14.” The '270 specification does not disclose the variation or varied compositional ratio required to achieve 10 times the illumination intensity disclosed in the '270 Patent.

**THIRD AFFIRMATIVE DEFENSE: Failure to Name all Inventors**

On information and belief, one or more claims of the '270 Patent are invalid for failing to meet one or more of the requisite statutory and decisional requirements and/or conditions for patentability under Title 35 of the United States Code, including without limitations §§ 115(a) and 256. For example and without limitation, the '270 specification includes the statement “The



present inventors have confirmed. . .” Ex. 1, col. 3:62 and 5:6. The ’270 specification therefore refers to multiple inventors in two separate statements. However, the ’270 Patent lists only a sole inventor.

**FOURTH AFFIRMATIVE DEFENSE: Lack of Standing / Failure to Join an Indispensable Party**

On information and belief, NSC lacks standing to bring a patent infringement action based on the ’270 patent. NSC’s CEO, Mr. Yoshihiko Muramoto, has represented in a publicly available blog, <http://www.nitride.co.jp/story/chapter119.html>, that Seoul Semiconductor Co., Ltd. (“Seoul Semiconductor”) or one of its affiliates is the exclusive licensee of the ’270 patent.

Mr. Muramoto has publicly stated that, since 2000, NSC has filed international patents on the structure of UV-LEDs. Ex. \_ at 1. Mr. Muramoto has further stated that NSC has granted exclusive use of these patents to the Seoul Semiconductor group. *Id.* The ’270 Patent was filed on March 6, 2002.

On information and belief, the ’270 Patent has been licensed to Seoul Semiconductor or one of its affiliates as the exclusive licensee, and therefore NSC lacks standing to bring this suit on the ’270 Patent. Alternatively, the exclusive licensee, Seoul Semiconductor or one of its affiliates, is an indispensable party to this patent infringement action. NSC has failed, however, to join this exclusive licensee as a party in this patent infringement action.

**FIFTH AFFIRMATIVE DEFENSE: Statutory Damages Limitation**

To the extent NSC seeks damages for any alleged infringement prior to its actual giving notice of the ’270 Patent to Digi-Key, NSC’s claim for damages is barred in whole or in part pursuant to at least 35 U.S.C. §§ 286 and/or 287.

**SIXTH AFFIRMATIVE DEFENSE: Failure to Mark**

On information and belief, to the extent any of NSC's products or licensees' products use the subject matter of any claims of the patents-in-suit, NSC's failure to mark its products and its failure to require any licensees to mark their products pursuant to 35 U.S.C. § 287 precludes NSC from recovering damages pursuant to that provision.

**SEVENTH AFFIRMATIVE DEFENSE: Prosecution History Estoppel**

As a result of the proceedings before the United States Patent and Trademark Office during the prosecution of the application that ultimately issued as the '270 Patent and related applications including those to which the '270 Patent claims priority, NSC's claims are barred, in whole or in part, by estoppel, including the doctrine of prosecution history estoppel. For example and without limitation, the applicant amended the claims of the '270 patent during prosecution to overcome prior art rejections in Amendments dated November 4, 2003 and September 9, 2004 as well as in a Request for Continued Examination on April 16, 2004. Prosecution history estoppel would apply to these amendments.

**EIGHTH AFFIRMATIVE DEFENSE: Limitation on Recovery of Costs**

NSC is precluded from seeking recovery of its costs under 35 U.S.C. § 288.

**NINTH AFFIRMATIVE DEFENSE: Unavailability of Injunctive Relief**

To the extent that NSC seeks injunctive relief for alleged infringement of the patent-in-suit, NSC fails to meet the requirements for injunctive relief. For example, the alleged injury to NSC from alleged infringement of the patent-in-suit is neither immediate nor irreparable. NSC has an adequate remedy at law for any alleged injury. In addition, NSC does not have a likelihood of success on its infringement claims.

**TENTH AFFIRMATIVE DEFENSE: No Equitable Relief**

NSC has no grounds for equitable relief, and any such claims for equitable relief are barred in light of the fact that NSC has adequate remedies at law.

**ELEVENTH AFFIRMATIVE DEFENSE: No Willful Infringement**

Digi-Key has not willfully infringed and is not willfully infringing any valid and enforceable claim of the '270 Patent.

**TWELFTH AFFIRMATIVE DEFENSE: No Attorney's Fees**

Digi-Key has not engaged in any conduct that entitles NSC to an award of attorney's fees.

Date: October 24, 2017

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